DECISION MEMO

MegaEnergy Operating, Inc. - Lead Mine Seismic Program
Monongahela National Forest
Cheat/Potomac Ranger District, Tucker County, WV

I. DECISION TO BE IMPLEMENTED

As the Responsible Official, my decision is to approve MegaEnergy Operating Inc.'s (Mega) application for a temporary Geophysical Exploration Permit on the Cheat/Potomac Ranger District. The permit authorizes seismic survey work on National Forest System lands only and does not authorize the use of private land. The permit does not convey any future rights to MegaEnergy Operating, Inc. nor does it affect the rights of others to conduct seismic surveys or affect existing oil and gas leases in the area. The permit will be issued for the period of one year, and the location is displayed on the attached map.

Mega requested authorization to conduct seismic surveys on lands managed by the USDA Forest Service in Tucker County, on the Cheat/Potomac Ranger District located west of State Route 7 (Horseshoe Run Road) and east of State Route 5 between Stemple Ridge and Camp Kidd, Shafer and St. George, respectively. The data collected from the survey would provide information for Mega about the subsurface rock structure and locations of potential natural gas reservoirs, and would be used to determine the potential to develop the natural gas resource in the area. The proposed action is to issue a temporary Geophysical Exploration Permit to MegaEnergy Operating, Inc. to conduct seismic surveys on USDA Forest System lands as shown in the application and on the attached maps.

Proposed types of seismic survey methods are vibroseis, shot hole, including hole depths of 6, 10 and 30 feet deep, and cable/geophone surveys. Vibroseis operations using trucks would be conducted on and along existing roads. Trucks equipped with bottom-mounted pads are driven along the road, stop at each vibration point, and vibrate the road surface for a duration of about 6 seconds. The vibration sends a low frequency signal into the earth that is reflected back to the surface, "heard" by the geophones and transmitted to a recording device through the cable. Mini-holes are drilled with a hand-held drill and the deeper holes are drilled with a Bobcat drill or a tracked or wheeled drill buggy. Explosive charges from 1/3rd pound to 5-pound charges are placed in the holes and detonated. Geophones placed on the surface pick up echoes and display the subsurface rock strata. Shot holes would be spaced from every 22 feet along the survey line in the case of mini-holes, up to every 110 feet along the line for holes 30 feet deep.

Project work is planned for 2004 and is subject to the following mitigating measures. These measures have been field-tested and developed through experience with these types of operations in conjunction with a site-specific field review of this proposal.

1. The District Ranger and Minerals Management Specialist will be notified before any work begins on National Forest lands, and a pre-work conference

- will take place. The Minerals Specialist will be notified upon completion so that the area can be inspected for damages and adherence to the conditions of this permit.
- **2.** Use of system roads is permitted for equipment and personnel access. Roads that are currently "brushed in" or not drivable would not be cleared.
- 3. Vibroseis trucks will be used only on roads authorized for Vibroseis trucks. Pick-up trucks, the wheeled drill buggy, the tracked drill buggy, and the Bobcat will be used only on roads authorized for truck traffic or the Vibroseis trucks. ATVs will not be permitted. The attached maps indicate specific types and locations of use authorized. Forest Service Engineering utilized the Maintenance Service Level database and field surveys to determine suitable roads for Vibroseis truck use.
- **4.** After November 15, access is limited to pick-up truck and foot access only, for cleanup only, (no shots or vibroseis) to minimize interference with hunting during deer-gun season, and to minimize potential effects to Forest System roads.
- **5.** Land corners and boundary lines will be protected. If damaged, a registered surveyor will replace them at the expense of the permittee.
- **6.** The permittee will provide a flagging crew to inform oncoming traffic of all hazards resulting from their operations. This will be done at any time a shot hole crew is working along any forest road where traffic may occur.
- 7. Upon inspection by Engineering, the Operator may be required to add gravel or crushed rock to Forest System Roads.
- **8.** Where no open roads exist, cables, geophones and other equipment will be manually carried into position on National Forest lands.
- **9.** No commercial timber will be cut. Brush cutting will be limited to a four-foot wide line-of-site clearance. No brush will be cut within 50 feet of designated hiking trails.
- **10.** No explosives will be stored overnight on National Forest lands.
- 11. All shot hole charges will be detonated. In the event that a charge does not fire, the District Ranger or the Minerals Specialist will be notified and measures will be implemented to cause complete detonation. Charged shot holes will be kept under surveillance by the permittee until detonated, and will be charged and detonated on the same day.

- 12. The District Ranger's office will be notified of any shot hole which naturally flows fresh water to the surface, prior to plugging the hole, so that the spring may be utilized by the Forest Service, if desired.
- 13. No shot holes will be placed within 50 feet of any stream.
- **14.** No shot holes will be placed within 100 feet of designated hiking trails.
- **15.** No shot holes will be placed within 350 feet of a well or natural spring.
- **16.** No shot holes will be placed within 200 feet of a camping area.
- 17. All shot holes will be restored to approximate contour, as deemed necessary by the District Ranger or Minerals Specialist. The permittee will fill the shot holes following detonation with the soil and/or rock removed during drilling. When material removed by drilling is insufficient to completely refill holes and the shot holes are deeper than 15', shot hole will be refilled to no shallower than 36 inches from the surface with bentonite. The remaining 36 inches will be capped with limestone gravel to the existing ground level. Shot holes or blowouts less than 15' deep will be filled with limestone gravel to the existing ground level.
- **18.** Any soil disturbance or damage to wildlife-vegetation-improvements resulting from these activities will be seeded and mulched immediately to the satisfaction of the Minerals Specialist in charge. All other surface disturbance to the National Forest caused by these permitted activities will be repaired to the satisfaction of the District Ranger or the Minerals Specialist.
- **19.** Any ruts in National Forest roads or trails created as a result of these permitted activities will be remediated to the original contour and standard of maintenance.
- **20.** The permit holder or his authorized representative shall pack out or otherwise remove from National Forest lands and waters all refuse resulting from operations under this permit.
- **21.** All flagging, detonation wire and other debris associated with this project will be removed at the time of project completion.

More descriptions, maps of the planned work and resource information are contained in the project file, which is available for public review at the Greenbrier Ranger District Office in Bartow, WV, from 8:00 a.m. to 4:30 p.m., Monday through Friday.

II. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are within one of the categories

identified by the U.S. Department of Agriculture in 7 CFR part 1b.3 or one of the categories identified by the Chief of the Forest Service in Forest Service Handbook (FSH) 1909.15 sections 31.1b or 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

I have concluded that this decision is appropriately categorically excluded from documentation in an environmental impact statement or environmental assessment as it is a routine activity within a category of exclusion and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. My conclusion is based on information presented in this document and the entirety of the Record.

My determinations of impacts of this seismic proposal are also based on past seismic work of the same type that has been conducted throughout the Forest in recent years. Forest monitoring of those projects shows very little site disturbance. Mitigation measures are able to limit the adverse impacts to resources. I am confident that this project can also be implemented successfully. I do not foresee cumulative adverse effects.

A. Category of Exclusion

The decision is within the category of exclusion FSH 1909.15 31.2 (8) that includes "Short-term (one year or less) mineral, energy, or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment, construction of less than one mile of low standard road (Service Level D, FSH 7709.56), or use and minor repair of existing roads".

B. Relationship to Extraordinary Circumstances

- 1. Threatened and Endangered Species or Their Critical Habitat
 The Endangered Species Act requires that federal activities do not
 jeopardize the continued existence of any species federally listed or
 proposed as threatened or endangered, or result in adverse modification to
 such species' designated critical habitat. In accordance with Section 7(c)
 of this Act, a list of the listed and proposed, threatened or endangered
 species that may be present in the project area was requested from the U.S.
 Fish and Wildlife Service. As required by this Act, potential effects of
 this decision on listed species have been analyzed and documented in a
 Biological Evaluation. (See the Biological Evaluation in the project file.)
 It was determined that there will be no direct, indirect, or cumulative
 effects to the Indiana bat, Virginia big-eared bat, or their habitats as a
 result of the proposed seismic surveys.
- 2. <u>Floodplains</u>. <u>Wetlands or Municipal Watersheds</u>. <u>Floodplains</u>: Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, "...the lowland and relatively flat

areas adjoining inland and coastal waters, including floodprone areas of offshore islands, including at a minimum, that area subject to a one percent (100 year recurrence) or greater chance of flooding in any one year." No modification or occupancy of the floodplain will occur. While seismic lines in this project cross floodplain areas, no shots are authorized within 50 feet of any stream or waterway, and this decision should not result in significant floodplain-related impacts.

<u>Wetlands:</u> Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, "...areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats and natural ponds." The project is not located in or near wetlands. This is been validated by map and site review. This decision will not affect wetlands. <u>Municipal Watersheds:</u> Municipal watersheds are managed under multiple use prescriptions in land and resource management plans. This decision will not affect any municipal watershed.

3. Congressionally Designated Areas

This project is not in nor does this decision affect Wilderness, Wilderness Study Areas, or National Recreation Areas.

4. Inventoried Roadless Areas

There are no inventoried Roadless areas in the project area and this decision will not affect inventoried Roadless areas.

5. Research Natural Areas

There are no Research Natural Areas within the project area and this decision will not affect Research Natural Areas or candidate Natural Resource Areas.

- 6. <u>American Indian and Alaska native religious or cultural sites</u>
 The Federal government has trust responsibilities to Tribes under a government-to-government relationship to ensure that the Tribes' reserved rights are protected. No tribal concerns were identified for this project.
- 7. Archaeological sites or historic properties or areas

Consultation requirements with the West Virginia Division of Culture and History have been fulfilled. A determination of "no effect" was made and this decision will not affect archaeological sites, or historic properties or areas.

No other extraordinary circumstances related to this project were identified.

III. PUBLIC INVOLVEMENT

Public involvement included listing in the Forest's *Schedule of Proposed Actions*, direct mailings and newspaper legal notices. Legal ads were placed in the Inter-Mountain

newspaper in Elkins, West Virginia on June 9 and 26, 2004, and the Parsons Advocate located in Parsons, West Virginia, on June 23 and 30, 2004. In addition, 52 scoping packages were mailed to interested and potentially affected individuals, groups, and agencies on June 18, 2004. Three comment letters were received, and the concerns raised were addressed in the development of mitigation measures.

IV. FINDINGS REQUIRED BY AND/OR RELATED TO OTHER LAWS AND REGULATIONS

My decision will comply with all applicable laws and regulations. I have summarized some pertinent ones below.

The proposed seismic survey meets the requirements of the National Forest Management Act (NFMA) and its regulations. For example, the proposed action meets applicable NFMA management requirements (36 CFR 219.27) such as for resource protection and riparian areas. Additionally, the Geophysical Permit request is consistent with the MNF Plan, Management Prescription 3.0 (FSM Ref 2800) that allows surface-disturbing exploration for minerals of the kind included in this proposal.

Endangered Species Act - See Section II, Item B1 of this document.

<u>Sensitive Species (Forest Service Manual 2670)</u> - This Manual direction requires analysis of potential impacts to sensitive species, those species for which the Regional Forester has identified population viability is a concern. Potential effects of this decision on sensitive species have been analyzed and documented in a Biological Evaluation. This decision will have "no impact" on sensitive species.

<u>Clean Water Act</u> - This Act is to restore and maintain the integrity of waters. The Forest Service complies with this Act through the use of mitigating measures. This decision incorporates site-specific mitigation measures to ensure protection of soil and water resources.

Wetlands (Executive Order 11990) - See Section II, Item B2 of this document.

Floodplains (Executive Order 11988) - See Section II, Item B2 of this document.

<u>Federal Cave Resources Protection Act</u> – This Act is to secure, protect, preserve, and maintain significant caves, to the extent practical. Site features and field review substantiate that no caves are in the area. No known cave resources will be affected by this decision.

National Historic Preservation Act – See Section II, Item B7 of this document.

Archaeological Resources Protection Act – See Section II, Item B7 of this document.

<u>Native American Graves Protection and Repatriation Act</u> - See Section II, Item B6 of this document.

Wild and Scenic Rivers Act – See Section II, Item B3 of this document.

<u>Environmental Justice (Executive Order 12898)</u> – This Order requires consideration of whether projects would disproportionately impact minority or low-income populations. This decision complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Public involvement did not identify any adversely impacted local minority or low-income populations. This decision is not expected to adversely impact minority or low-income populations.

<u>National Environmental Policy Act</u> - This Act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with this Act.

V. ADMINISTRATIVE REVIEW OR APPEAL OPPORTUNITIES

This Decision is not subject to an administrative review or appeal pursuant to 36 CFR 215.12(f).

VI. IMPLEMENTATION DATE

This Decision may be implemented immediately, and seismic surveys may commence upon issue of the temporary Geophysical Exploration Permit.

VII. CONTACT PERSON

Further information about this decision can be obtained from Deb Sholly during normal office hours (weekdays, 8:00 a.m. to 4:30 p.m.) at the Greenbrier Ranger District in Bartow, West Virginia; Phone: voice (304) 456-3335; FAX (304) 456-3441; email dsholly@fs.fed.us.

VIII. SIGNATURE AND DATE

/s/ Jeffrey J. Hammes
Jeffrey J. Hammes
District Ranger
Responsible Official

August 26, 2004 Date

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